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REMARKS

The Office Action of March 21, 2003 has been received and carefully reviewed. It is submitted that, by this Communication, all bases of rejection and objection are traversed and overcome. Upon entry of this Amendment, Claims 1-19 remain in the application.

Claims 3-4, 5-6 and 13 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner notes an inconsistency in the "10% of the cation sites" recitation in claim 1 vis-a-vis the relevant subject matter in the enumerated claims. Claim 1 has been revised herein to recite that the metal cation is presented in an atomic amount corresponding to up to about 20% of the cation sites. As such, it is submitted that the Section 112, second paragraph rejections have been traversed and overcome.

Claims 1-4, 7-10, 14-17 and 19 stand rejected under 35 U.S.C. 102(a) as being anticipated by JP 10-128106. The Examiner states that JP 10-128106 discloses a zeolite X adsorbent which has been ion exchanged with lithium and an additional monovalent cation such as silver. The Examiner notes that the lithium is exchanged in the range of 2-4%. With regard to the properties recited in claims 1 and 7-10, the Examiner asserts that because the reference teaches the same heat treatment step of the lithium and silver exchanged zeolite under the same conditions, the same product would inherently form.

In Applicants' invention as defined in revised claims 1 and 16, it is recited that the composition is adapted to selectively adsorb a compound at about ambient room temperature conditions, and in Applicant's invention as defined in revised claim 14, it is recited that the contacting step is carried out at about ambient room temperature conditions. It is submitted that support for this language may be found in several areas of the specification, for example, at page 7 in the Summary of the Invention which states:

Preferential adsorption of nitrogen is preferably achieved by pressure swing adsorption. Conveniently, this may be carried out and is preferably carried out at about ambient room temperature conditions.

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JP 10-128106 in Tables 2 and 3 discloses the adsorption amounts of  $N_2$  and  $O_2$  on zeolites containing binary, mixed cations. The mixed cations are 88% Li and 2 or 3 % Tl, Rb, Sc, Ag, K or Na. Based on these results, the LiAg mix is the second worst one. Tables 4 and 5 further show the separation results (by pressure swing adsorption process) using these sorbents. Again, the zeolites with mixed LiAg cations are among the worst ones. As such, it is submitted that this reference teaches away from using LiAg mixed cations. Furthermore, this reference teaches that the temperature should be low, i.e., at  $0^\circ\text{C}$  or  $10^\circ\text{C}$ , not at room temperature (between about  $20^\circ\text{C}$  and about  $25^\circ\text{C}$ ) as recited in Applicants' claims 1, 14 and 16.

For these reasons, it is submitted that Applicants' invention as defined in claims 1, 14 and 16, as well as in all claims dependent therefrom, is not anticipated, taught or rendered obvious by JP 10-128106, either alone or in combination, and patentably defines over the art of record.

Claims 1, 10-16 and 18-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Coe et al. The Examiner states that Coe discloses a binary exchanged zeolite having an exchangeable ion content of between 5-95% lithium and a second ion such as copper. The Examiner states that given the percent exchanged detailed by the reference, it appears that the second ion, i.e. copper, would be present in an amount greater than sodium, but less than Li.

In Applicants' invention as defined in claims 1, 14 and 16, it is recited that the metal has a valence state of +1. In sharp contrast, the Coe patent limits itself to divalent (eg.  $\text{Cu}^{2+}$ ) cations. See, for example, the Coe Abstract which states:

The present invention is directed to an at least binary exchanged X-zeolite having lithium and a **divalent** cation selected from the group consisting of cobalt, copper, chromium, iron, manganese, nickel and mixtures thereof in a ratio of preferably 5% to 50% of the **divalent** cation and 50% to 95% lithium. (emphasis added)

As such, since Applicants' invention as defined in claims 1, 14 and 16 recites monovalent cations, it is submitted that Applicants' invention as defined in claims 1, 14 and 16, as well as in all claims dependent therefrom, is not anticipated, taught or rendered obvious by Coe, either alone or in combination, and patentably defines over the art of record.

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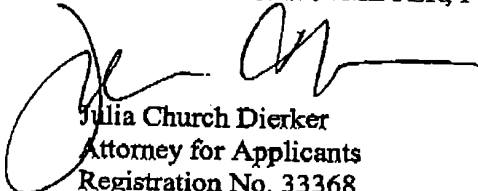
The Examiner states that claims 5-6 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base and any intervening claims. It is submitted that the Section 112, second paragraph rejections have been overcome, and the claims have been rewritten to include all of the limitations of the base and any intervening claims. As such, it is submitted that these claims are in condition for allowance, notice of which is respectfully requested.

In summary, Claims 1-19 remain in the application. Claims 1, 3, 4, 5, 14, 16 and 17 have been revised. It is submitted that, through this Communication, Applicants' invention as set forth in these claims is now in a condition suitable for allowance.

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, she is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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